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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,423	11/20/2003	Thierry Lucidarme	218728-000205	9659
21906 7590 02/12/2007 TROP PRUNER & HU, PC 1616 S. VOSS ROAD, SUITE 750 HOUSTON, TX 77057-2631			EXAMINER KUMAR, PANKAJ	
			ART UNIT	PAPER NUMBER
			2611	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		02/12/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/718,423

Applicant(s)

LUCIDARME ET AL.

Examiner

Pankaj Kumar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 18 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 5, 6, 9, 10, 13, 14 is/are rejected.
- 7) ☒ Claim(s) 3, 4, 7, 8, 11, 12, 15 and 16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1, 2, 9, 10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention since for example claims 1 and 2 appear to contradict each other.
3. Claim 2 depends on claim 1. Claim 1 says that the order is greater than 2. Claim 2 indicates that the order can be less than 2. Hence, claims 1 and 2 contradict each other.
4. Similar issue exists with claims 9 and 10.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 5, 6, 9, 13, 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Skold USPN 5903610 in view of Hanson USPN 5652715.
7. As per claim 1, Skold teaches a method for detecting a signal burst transmitted on the initiative of a sender on a radio channel listened to by a receiver system (Skold fig. 1: receiving transmission), the transmitted burst representing a predetermined digital sequence (Skold fig. 1: bn is representing 17 since it is being correlated, synchronized and is being used together in other

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operations), in which method channel parameters representing a statistical behavior of the radio channel are estimated (Skold fig. 1: 20, 22 input bn) and a detection magnitude is evaluated (Skold fig. 1: 24) on the basis of the estimated channel parameters (Skold fig. 1: 20, 22) and of a correlation between a signal received at the receiver system (Skold fig. 1: left input into 16) and the predetermined digital sequence (Skold fig. 1 bottom input into 16), wherein said estimated channel parameters comprise moments of order greater than 2 of the gain on the radio channel (not in Skold but would be obvious as explained below). Hanson 5652715 teaches wherein said estimated channel parameters comprise moments of order greater than 2 of the gain on the radio channel (Hanson 5652715 col. 4 line 14:  $y$  comprises a calculation with an order of 3 as  $(1-u)$  is cubed). Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to implement the teachings of Hanson into Skold since Skold suggests signal and channel parameters (Skold title has channel estimation) (something broad) in general which are effected by noise and Hanson suggests the beneficial use of estimating signal noise using a cubic spline curve such as to reduce noise (Hanson cols. 3, 4) in the analogous art of signal and correlation.

8. As per claim 5, Skold in view of Hanson teaches the method as claimed in claim 1, in which said sender is a mobile terminal, said receiver system belongs to a radiocommunication network and in which said burst is sent so as to request access to the network (Skold fig. 1: b receives access to the receiver and hence inherently requested access when transmitted).

9. As per claim 6, Skold in view of Hanson teaches the method as claimed in claim 1, in which said sender comprises a base station of a radiocommunication network, said receiver system forms part of a mobile terminal, and in which said burst is sent for the temporal

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synchronization between the sender and the receiver system (Skold fig. 1: synchronization; abs: digital radio communication system).

10. Claim 9 is discussed above with respect to claim 1.
11. Claim 13 is discussed above with respect to claim 5.
12. Claim 14 is discussed above with respect to claim 6.

***Allowable Subject Matter***

13. Claims 3, 4, 7, 8, 11, 12, 15, 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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***Conclusion***

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pankaj Kumar whose telephone number is (571) 272-3011. The examiner can normally be reached on Monday through Friday.

15. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

16. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Pankaj Kumar  
Primary Examiner  
Art Unit 2611

PK